

## REMARKS

In the previous Office Action, independent Claims 1, 8, and 12 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the proposed combination of U.S. Patent No. 6,377,526 to Vining et al. and U.S. Patent No. 6,490,703 de la Iglesia et al. In its prior Amendment, Applicants amended these independent claims to recite elements relating to inverting a plurality of bits irrespective of a number of logic one bits in the plurality of bits. In the present Office Action, the Examiner admitted that the combination of Vining et al. and de la Iglesia et al. does not show these elements and relied on U.S. Patent No. 5,247,494 to Ohno et al. to cure this deficiency. Applicants respectfully submit that one skilled in the art would not have been motivated to combine Ohno et al. with Vining et al. and de la Iglesia et al., as proposed in the Office Action.

Ohno et al. is directed to a specialized optical disk having a write-once zone and a re-writable zone, with each zone having a different chemical makeup. Because of the differences in chemical makeup, different techniques are used to record a "1" in each of the two zones. Specifically, to record a "1" in the write-once zone, a pulsed light beam is used to create a spot of *high* reflectance. In contrast, to record a "1" in the re-writable zone, a pulsed light beam is used to create a spot of *low* reflectance. Accordingly, a "1" is represented by a high reflectance spot in the write-once zone and a low reflectance spot in the re-writable zone. Col. 9, lines 7-16 of Ohno et al. teach that it is desirable to make a "1" be represented by the same level of reflectance (low reflectance) across the entire disk, irrespective of whether the "1" is stored in the write-once zone or the re-writable zone. To accomplish this, Ohno et al. uses an inverter to cause a "1" to be recorded as a "0" in the write-once zone. In this way, an inverted "1" is stored as a spot of

*low* reflectance instead of *high* reflectance, thereby providing the disk-wide consistency that Ohno et al. desires.

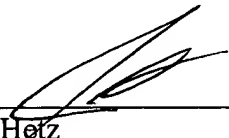
In the Office Action, it was asserted that one skilled in the art would have been motivated to add Ohno et al. to Vining et al. and de la Iglesia et al. “because it enables storage [of] data for a long time without necessitating use of a complicated configuration” of having a “1” being represented in different regions of an optical disk by spots of different levels of reflectance. Applicants respectfully submit that this is insufficient motivation to combine the references. As a first matter, the “complicated configuration” of having a “1” being represented by different levels of reflectance in different regions of an optical disk is not a problem in either Vining et al. or de la Iglesia et al. Vining et al. does not use the specialized “two-zone” optical disk disclosed in Ohno et al. with its spots of different levels of reflectance to store data, and de la Iglesia et al. is directed to semiconductor memory devices, which do not use reflectance to store data. Accordingly, neither Vining et al. nor de la Iglesia et al. presents the problem for which inverting is a solution. Simply put, one skilled in the art would not have been motivated to adopt a solution for a problem that does not exist.

Lack of motivation is further shown by the fact that the addition of Ohno et al. would be contrary to the basic operating principle of de la Iglesia et al. The basic operating principle of de la Iglesia et al. is to save bus power by inverting bits in a data string when the number of logic one bits exceeds fifty percent of the total number of bits. If de la Iglesia et al. were modified such that a data string is inverted irrespective of the number of logic one bits, some data strings would be stored with more logic one bits than logic zero bits. This would result in higher power consumption, thereby reintroducing the very problem that de la Iglesia et al. seeks to overcome.

In summary, because Vining et al. and de la Iglesia et al. do not present the need for the solution set forth in Ohno et al. and because the addition of Ohno et al. would be contrary to the basic operating principle of de la Iglesia et al., Applicants respectfully submit that one skilled in the art would not have been motivated to combine Ohno et al. with Vining et al. and de la Iglesia et al. Accordingly, Applicants respectfully request that the rejections of independent Claims 1, 8, and 12 and their dependent claims be withdrawn. If there are any questions concerning this Response, the Examiner is invited to contact the undersigned attorney at (312) 321-4719.

Dated: February 1, 2005

Respectfully submitted,



---

Joseph F. Hetz  
Reg. No. 41,070  
Attorney for Applicants

BRINKS HOFER  
GILSON & LIONE  
P.O. Box 10395  
Chicago, Illinois 60610  
(312) 321-4719